

## **ASSIGNMENT 8 | CRUD from PHP to MySQL**

This assignment relates to the following Course Learning Requirements:

**CLR 2:** Produce tested code that executes correctly and consistently through the use of valid and invalid data.

**CLR 3:** Prepare program documentation using prescribed program specifications

**CLR 4:** Debug program problems using manual methods and computerized tools in an appropriate manner

**CLR 5:** Modify an existing program according to program specifications

**CLR 6:** Access and modify a database table from within a web browser interface

### **Objective of this Assignment:**

The objective of this assignment is to switch reading input from a file to reading from a database table. This can be achieved through the creation of a MySQL database table and performing some essential CRUD SQL statements.

Upon completing this assignment, you should be able to:

- From a PHP page, create a MySQL database
- From a PHP page, create the appropriate tables
- From a PHP page, apply CRUD operations using SQL language

### **Pre-Assignment Instructions:**

1. To prepare you for this assignment, read the module 12 content and embedded examples.

### **Assignment Tasks:**

#### **PART 1**

1. Create a new PHP file called "init.php"
2. Implement the following in init.php:
  - a. Code in PHP to create a new SQL database called "assignment8"
  - b. Code in PHP to create a new table called "Items" in the "assignment8" database
  - c. Ensure that the "Items" table has the following columns:

Name	Type	Length/Values	Default	Attributes
ID	INT	6	NONE	Unsigned, auto_increment, primary key
Name	VARCHAR	40	NONE	
Type	VARCHAR	40	NONE	
Make	VARCHAR	40	NONE	
Model	VARCHAR	40	NONE	
Brand	VARCHAR	40	NONE	

- d. Add each item from "input.csv" (created by you in Assignment 7) to a new row of the "Items" table  
In summary, init.php will create the database, connect to it, create the table with the columns list provided above and populate this table with records read from the content of the file "input.csv"
3. Amend the PHP code in index.php such that the HTML table is now populated with the items from the "assignment8" database by using a SELECT statement
4. Ensure that the Javascript search functionality from Assignment 7 works with the HTML table containing the data from the "assignment8" database only. The HTML table from Assignment 7 should be removed so that there is only one table visible and being searched by the user.
5. Similar to Assignment 7, ensure that the HTML table is hidden if the search field is empty and that filtered rows from the HTML table containing the text from the search field are shown when text is entered into the search field
6. Ensure that your PHP file executes without errors

## PART 2

1. Create a .zip file containing the following files: index.php, init.php, input.csv
2. Submit the .zip file through Brightspace

### Important notes:

- Please make sure to follow carefully the instructions above. This should be treated as requirements set out by a customer, so please ensure that they are all met as described. This is also reflected in the rubric.
- It is important to use only a regular text editor such as a Visual Studio Code (VS Code), Notepad, or Notepad++ . An IDE, such as Eclipse or Dreamweaver, cannot be used to complete this. It is highly recommended to use VS Code.

## Assignment Grading Rubric (12%)

Database	Level 2	Level 1	Criterion Score
Creation	2 points A new database is successfully created and connected to through PHP	0 points A new database is not successfully created and connected to through PHP	/ 2
Structure	1 point The database contains the following elements: ID of type INT and length 6 Name of type VARCHAR and length 40 Type of type VARCHAR and length 40 Make of type VARCHAR and length 40 Model of type VARCHAR and length 40 (0.2 pts each)	0 points The database does not contain the following elements: ID of type INT and length 6 Name of type VARCHAR and length 40 Type of type VARCHAR and length 40 Make of type VARCHAR and length 40 Model of type VARCHAR and length 40 (0.2pts each)	/ 1
Input	2 points The items from an input csv file are imported into the database table through PHP	0 points The items from an input csv file are not imported into the database table through PHP	/ 2
Display	2 points The data contained in the database is displayed through an HTML table with each item on a separate row	0 points The data contained in the database is not displayed through an HTML table with each item on a separate row	/ 2
Search	1 point A Javascript script is used to search through the items in the database when the user enters text in the search field. No items are displayed when the search field is empty. (0.5 pts each)	0 points A Javascript script is not used to search through the items in the database when the user enters text in the search field. Some items are displayed when the search field is empty. (0.5 pts each)	/ 1

Validation	Level 3	Level 2	Level 1	Criterion Score
Code validation	2 points PHP script is error-free	0.5 points PHP script contains one or more errors	0 points No PHP script was submitted	/ 2

Total	/ 10			
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